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January 25, 2001

FILE: EMCS:027 10831.0027.000000

CERTIFICATE OF MAILING 37 C.F.R. 1.8

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Date

Commissioner for Patents Washington, DC 20231

RE:

SN 09/678,041 "Reduced Noise Dynamoelectric Machine" (E-2249)

Sir:

Enclosed for filing in the above-referenced patent application is an Information Disclosure Statement, Form PTO-1449 and references.

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is authorized to charge the fee to Deposit Account No. 01-2508/10831.0027.000000. Should any additional fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed materials, the Commissioner is authorized to deduct said fees from Deposit Account No. 01-2508/10831.0027.000000.

Please date stamp and return the enclosed postcard evidencing receipt of these materials.



Commissioner for Patents January 25, 2001 Page 2

Please forward any reply to this communication directly to our Houston office for docketing purposes. The mailing address is 750 Bering Drive, Houston, Texas, 77057-2198, and the Houston fax number is 713.787.1440.

Respectfully submitted,

Robert J. McAughan, Jr.

Reg. No. 36,599

Encl: Information Disclosure Statement

Form PTO-1449 with References

Postcard

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Form PTO-1449 (modified)

Atty. Docket No. 10831.0027.000000

Serial No.

09/678,041

List of Patents and Publications for Applicant's

Applicant: Gary E. Horst

INFORMATION DISCLOSURE STATEMENT

Title: Reduced Noise Dynamoelectric Machine

Filing Date:

Group:

(Use several sheets if necessary)

October 3, 2000

2834

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**Foreign Patent Documents** 

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### **U.S. Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	Al	RE 34,609	05/17/94	Mueller	318	254	06/22/87
	A2 ·	RE 36,568	02/15/2000	Horst	318	701	12-29-93
	A3	747,698	12/22/03	Geisenhoner	N/A	N/A	8/28/01
	A4	4,164,696	08/14/79	Kastilahn et al.	318	696	08/10/77
	A5	4,213,070	7/15/80	Lund et al.	310	71	8/10/78
	A6	4,249,116	2/3/81	Hieda	318	254	3/23/79
	A7	4,253,053	2/24/81	Ray et al.	318	701	3/28/78
	A8	4,427,910	1/24/84	Richter et al.	310	214	3/1/82
· •	A9	4,447,771	5/8/84	Whited	318	661	8/31/81
	A10	4,488,101	12/11/84	Studtmann	318	800	12/23/82
	A11	4,500,824	02/19/85	Miller	318	701	05/21/84
	A12	4,520,302	5/28/85	Hill et al.	318	696	3/12/84
	A13	4,563,619	1/7/86	Davis et al.	318	138	4/6/83
	A14	4,661,756	4/28/87	Murphy et al.	318	701	10/18/85
	A15	4,670,696	6/2/87	Byrne et al.	318	701	10/18/85
	A16	4,672,253	06-09-87	Tajimal et al.	310	269	07-25-85
	A17	4,691,038	10/2/90	MacMinn	318	696	10/16/89
	A18	4,712,050	12/8/87	Nagasawa et al.	318	254	1/30/87
	A19	4,731,570	3/15/88	Lee	318	696	9/8/86
	A20	4,761,580	8/2/88	Hein et al.	310	214	6/17/87
	A21	4,849,873	7/18/89	Vanderhelst	363	55	11/05/87

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EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)

List of Patents and Publications for

Atty. Docket No. 10831.0027.000000 Serial No.

09/678,041

Applicant: Gary E. Horst

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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
-	A22	4,859,921	8/22/89	Archer	318	599	3/10/88
	A23	4,868,477	9/19/89	Anderson et al.	318	696	6/23/87
	A24	4,933,584	07-12-90	Harms et al.	310	162	12-22-88
	A25	4,933,621	6/12/90	MacMinn et al.	318	696	5/12/89
	A26	4,943,760	7/24/90	Byrne et al.	318	701	11/2/88
	A27	4,961,038	10/02/90	MacMinn	318	696	10/16/89
	A28	5,072,166	12/10/91	Ehsani	318	696	6/18/90
	A29	5,075,610	12/24/91	Harris	318	701	3/28/91
	A30	5,119,000	6/2/92	Schultz et al.	318	254	2/25/91
	A31	5,122,697	06-16-92	Horst	310	181	04-30-90
	A32	5,124,607	6/23/92	Rieber et al.	310	214	5/19/89
	A33	5,140,207	8/18/92	Baumeister	310	83	12/13/89
	A34	5,144,209	9/1/92	Ingji, et al.	318	254	6/28/91
	A35	5,175,458	12/29/92	Lemmer et al.	310	71	9/4/91
	A36	5,196,775	3/23/93	Harris et al.	318	638	2/20/91
	A37	5,239,217	08-24-93	Horst	310	51	05-18-92
	A38	5,239,220	8/24/93	Taji et al.	310	214	8/26/92
	A39	5,250,867	10-05-93	Gizaw	310	179	11-20-91
	A40	5,270,603	12/14/93	Narumi	310	260	4/22/92
	A41	5,294,856	03-15-94	Horst	310	181	08-20-91
-	A42	5,296,785	3/22/94	Miller	318	254	8/25/93
	A43	5,306,976	04-26-94	Beckman	310	215	01-29-93

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Form PTO-1449 (modified)

Atty. Docket No. 10831.0027.000000 Serial No.

09/678,041

List of Patents and Publications for

Gary E. Horst Applicant:

INFORMATION DISCLOSURE STATEMENT

Title: Reduced Noise Dynamoelectric Machine

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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A44	5,343,105	8/30/94	Sakabe et al.	310	179	1/29/93
	A45	5,373,206	12/13/94	Lim	310	68	2/17/93
	A46	5,386,162	01-31-95	Horst	310	51	04-06-93
	A47	5,446,359	08-29-95	Horst	318	701	12-29-93
	A48	5,461,295	10-24-95	Horst	318	701	01-28-94
	A49	5,479,080	12/26/95	Jones et al.	318	701	7/23/93
	A50	5,487,213	1/30/96	Hult et al.	29	556	5/2/94
	A51	5,563,488	10/8/96	Stephenson et al.	318	701	6/7/95
	A52	5,589,752	12/31/96	Iwasaki et al.	318	701	04/25/95
	A53	5,604,388	02-18-97	Baker et. al.	310	51	02-16-94
	A54	5,701,064	12-23-97	Horst et. al.	318	701	10-27-95
	A55	5,770,910	06-23-98	Horst	310	214	12-30-93
	A56	5,852,334	12-22-98	Pengov	310	168	10-19-95
	A57	5,986,418	11-16-99	Horst, et. al	318	254	11-24-97
	A58	6,028,385	02-22-2000	Pengov	310	166	10-26-98
*	A59	6,051,903	04-18-2000	Pengov	310	168	10-13-98
	A60	6,072,260	06-06-2000	Randall	310	216	01-19-99

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Exam. Init.	Ref. Des.	Document Number /	Date	Country	Class	Sub Class	Translation Yes/No
	BI	0 557 811 A1	9/01/93	Europe	H02P	6/02	No
	B2 ,	0 749 202 A1	12/18/96	Europe	H02P	7/05	No

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List of Patents and Publications for Applicant's

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Title: Reduced Noise Dynamoelectric Machine

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Group:

Timing Date.

October 3, 2000

Applicant: Gary E. Horst

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### **Foreign Patent Documents**

Exam. Init.	Ref. Des.	Document / Number	Date	Country	Class	Sub Class	Translation Yes/No
	В3	03-089897 A	A/15/91	Japan	H02P	8/00	Abstract
	B4 .	2 167 253 A	5/21/86	United Kingdom	H02P	6/00	No
	В5,	2 167 910 A	6/4/86	United Kingdom	H02K	1/06	No
	В6 -	4 036 565 A1	5/21/92	Germany	H02P 8	8/00	Abstract
_	B7 .	WO 93/05564	3/18/93	WIPO	H02P	6/02	No
	B8 ,	WO 94/28618	12/8/94	WIPO	H02P	6/02	No

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	Cl	Abstract of Japanese patent application no. 06-086769 published as 07-298669 November 10, 1995
	C2	C. Pollock and C. Y. Wu, "Acoustic Noise Cancellation Techniques for Switched Reluctance Drives," Record of the Industry Applications Conference (IAS); Vol.1, pp. 448-455, Orlando, Florida, October 8-12, 1995
	C3	C. Y. Wu and C. Pollock, "Analysis and Reduction of Vibration and Acoustic Noise in the Switched Reluctance Drive," 1993, Proceedings of the IAS '93, pp. 106-113
	C4	C. Y. Wu and C. Pollock, "Analysis and Reduction of Vibration and Acoustic Noise in the Switched Reluctance Drive," <i>IEEE Transactions on Industry Applications</i> , Vol. 31, No. 1 pp. 91-98, January/February 1995
	C5	Charles Pollock and Barry W. Williams, "A Unipolar Converter for a Switched Reluctance Motor," Conference Record of the 1988 IEEE Industry Applications Society Annual Meeting, pp. 44-49, Pittsburg, Pennsylvania, October 2-7, 1988
	C6	D. E. Cameron et al., "The Origin and Reduction of Acoustic Noise in Doubly Salient Variable-Reluctance Motors," November/December 1992, IEEE Transactions on Industry Applications, Vol. 28 No. 6, pp. 1250-1255

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List of Patents and Publications for	· Applicant's	Applicant: Gary E. Ho	orst	
Information Disclosure S	TATEMENT	Title: Reduced Noise Dynamoelectric Machine		
(Use several sheets if necess	ary)	Filing Date: October 3, 2000	Group: 2834	
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Exam. Init.	Ref. Des.	Citation
	C7	F. Blaabjerg et al., "Investigation and Reduction of Acoustical Noise from Switched Reluctance Drives in Current and Voltage Control," September 5-71994, Proc. ICEM '94, pp. 589-594
	C8	Frede Blaabjerg and John K. Pedersen, "Digital Implemented Random Modulation Strategies for AC and Switched Reluctance Drives," Proceedings of the IECON'93, pp. 676-682, International Conference Industrial Conference on Industrial Electronics, Control and Instrumentation, Maui, Hawaii, Nov. 15-19, 1993.
	С9	Mehdi Moallem et. al., "Effect of Rotor Profiles on the Torque of a Switched-Reluctance Motor", <i>IEEE Transactions on Industry Applications</i> , Vol. 28, No. 2, March/April 1992, ppgs. 364-369
	C10	Richard S. Wallace and David G. Taylor, "A Balanced Commutator for Switched Reluctance Motors to Reduce Torque Ripple," IEEE Transactions on Power Electronics, vol. 7, No. 4, pp. 617-626, Oct. 1992.
	C11	Richard S. Wallace and David G. Taylor, "Low-Torque-RippleSwitched Reluctance Motors for Direct-Drive Robotics," <i>IEEE Transactions on Robotics and Automation</i> , Vol. 7, No. 6, pp. 733-742, December 1991
	C12	Richard S. Wallace, Jr., "Design and Control of Switched Reluctance Motors to Reduce Torque Ripple," Georgia Institute of Technology, Nov. 1990.
	C13	S. Chan et al., "Performance Enhancement of Single-Phase Switched-Reluctance Motor by DC Link Voltage Boosting," September 1993, IEEE Proceedings-B, Vol. 140, pp. 316-322
	C14	Shi-Ping Hsu et al., "Modeling and Analysis of Switching DC-to-DC Converters in Constant- Frequency Current-Programmed Mode," 1979, IEEE Power Electronics Specialists Conference, pp. 284-301
	C15	Stephenson and Blake, "The Characteristics, Design and Applications of Switched Reluctance Motors and Drives," PCIM Conference & Exhibition, June 21-24, 1993, Nuremberg, Germany

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